United States District Court
Northern District of California

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

IPSILIUM LLC,

Plaintiff,

v.

CISCO SYSTEMS, INC.,

Defendant.

Case No. 17-cv-07179-HSG

CLAIM CONSTRUCTION ORDER AND ORDER GRANTING MOTION TO STRIKE

Re: Dkt. No. 53

On December 18, 2017, Plaintiff Ipsilium LLC ("Ipsilium") filed this patent infringement action against Defendant Cisco Systems, Inc. ("Cisco"). Dkt. No. 1. Ipsilium subsequently filed an amended complaint. Dkt. No. 15. The parties now seek construction of eight terms found in two patents: Patent Nos. 6,819,681 ("the '681 Patent") and 6,961,777 ("the '777 Patent") (collectively, "the Asserted Patents").[1] *See* Dkt. No. 75-1 ("Am. JCCS"). This order follows claim construction briefing, a technology tutorial, and a claim construction hearing ("*Markman* hearing"). *See* Dkt. Nos. 52 ("Op. Br."), 54 ("Resp. Br."), 55 ("Reply Br."), 69 ("*Markman* Tr."). At the *Markman* hearing, the Court instructed the parties to submit supplemental briefing, which the parties timely provided. *See Markman* Tr. 104:11–16; *see also* Dkt. Nos. 73 ("Pl.'s Supp. Br."), 74 ("Def.'s Supp. Br.").

Also pending before the Court is Cisco's motion to strike the declaration of Ipsilium's

---

[1] The parties initially also sought construction of "means for determining a first value of the obtained field" from claim 16 of the '681 Patent and "means for determining the value of the obtained field" in claim 16 of the '777 Patent. The parties have since stipulated that the limitation has a function of "determining a first value of the obtained field" with a structure of "a processor or microprocessor executing instructions, hardwired circuitry, or silicon via combination of logic gates." *See* Resp. Br. at 7 n.1. Given this agreement, the Court adopts the parties' stipulated construction.

expert, Dr. Daniel A. Menascé, briefing for which is also complete. Dkt. Nos. 53 ("Mot."), 57

("Opp."), 62 ("Reply"). This order turns first to the motion to strike, because its resolution will

determine whether the Court will consider Dr. Menascé's declaration in construing the disputed

claims.

I.   MOTION TO STRIKE

On August 15, 2018, the parties exchanged preliminary claim constructions, as required by

this Court's June 29, 2018 scheduling order. *See* Dkt. No. 46 (setting deadline); Dkt. No. 53-3

(Cisco's Preliminary Claim Constructions); Dkt. No. 53-4 (Ipsilium's Preliminary Claim

Constructions). Cisco's August 15 disclosure provided that it "may rely on the expert testimony

of Dr. Kevin Almeroth" for various subjects. *See* Dkt. No. 53-3 at 3. Ipsilium's August 15

disclosure provided the following concerning expert testimony:

> Further, Ipsilium does not believe that expert testimony is necessary for the court to understand the meaning of the claims. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 (Fed. Cir. 1996 (Reliance on expert testimony is unnecessary and improper "when the disputed terms can be understood from a careful reading for the public record.")[.] To the extent Cisco proposes to rely on any such expert testimony, Ipsilium reserves the right to offer rebuttal testimony from its expert(s).

Dkt. No. 53-4.

As also required by this Court's scheduling order, the parties filed a Joint Claim

Construction and Prehearing Statement on August 30, 2018. *See* Dkt. No. 46 (setting deadline);

Dkt. No. 51 ("JCCS"). The JCCS provided the following regarding extrinsic evidence supporting

the parties' proposed constructions of disputed terms:

> A declaration from Cisco's expert, Dr. Kevin Almeroth is attached as Exhibit B. Ipsilium does not believe that expert testimony is necessary to construe the disputed terms but reserves the right to provide rebuttal testimony from its expert.

. . .

> [In a corresponding footnote:] Any expert testimony, including declarations, on which Ipsilium intends to rely is due concurrently with this statement, per [Patent Local Rule] 4-3, and Cisco will oppose any attempt to rely on improper and out of time expert rebuttal testimony, which is not contemplated or permitted by the rules. Indeed, to avoid precisely this situation, counsel for Cisco specifically

1   confirmed the deadline to counsel for Ipsilium via email on August
     10, 2018.

2

3   JCCS at 2 & n.1. Cisco filed its expert declaration and served it on Ipsilium the same day. *See*

4   JCCS Ex. B. Nearly three weeks later, Ipsilium filed its opening claim construction brief. *See*

5   Dkt. No. 52. With it, Ipsilium included a declaration from its expert, Dr. Daniel A. Menascé. *See*

6   Dkt. No. 52-1.

7   Pursuant to the Court's June 29, 2018 order, claim construction discovery closed on

8   September 7, 2018—eleven days before Ipsilium disclosed the identity and opinions of its expert.

9   *See* Dkt. No. 46. Cisco now moves to exclude Dr. Menascé's expert report as violative of Patent

10   Local Rules 4-2 and 4-3.

11   **A.   Legal Standard**

12   Federal Rule of Civil Procedure 37(c)(1) provides: "If a party fails to provide information

13   or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that

14   information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure

15   was substantially justified or is harmless." In addition, or instead, the court may also impose other

16   appropriate sanctions provided for in Rule 37. *See* Fed. R. Civ. P. 37(c)(1)(A)-(C). "The party

17   facing sanctions bears the burden of proving that its failure to disclose the required information

18   was substantially justified or is harmless." *R & R Sails, Inc. v. Ins. Co. of Pa.*, 673 F.3d 1240,

19   1246 (9th Cir. 2012).

20   Rule 37(c)(1) "gives teeth" to Rule 26's disclosure and supplementation requirements,

21   including the requirement that parties disclose expert reports "at the times and in the sequence that

22   the court orders." *Yeti by Molly, Ltd. v. Deckers Outdoor Corp.*, 259 F.3d 1101, 1106 (9th Cir.

23   2001); Fed. R. Civ. P. 26(a)(2)(D). The Advisory Committee Notes to the 1993 amendments to

24   Rule 37 describe subsection (c)(1) as a "self-executing," "automatic sanction [that] provides a

25   strong inducement for disclosure of material" that must be disclosed pursuant to Rule 26. Rule

26   37(c)(1) sanctions based on failure to disclose evidence in a timely manner may be appropriate

27   "even when a litigant's entire cause of action or defense" will be precluded. *Yeti*, 259 F.3d at

28   1106.

3

B.   Discussion

Under the Court's scheduling order, the parties were required to exchange preliminary claim constructions on August 15, 2018, and to file the JCCS by August 30, 2019. Dkt. No. 46. As to the exchange of preliminary claim constructions, Patent Local Rule 4-2 provides that "[a]t the same time the parties exchange their respective 'Preliminary Claim Constructions,' each party shall . . . designate any supporting extrinsic evidence including . . . expert witnesses." Patent L.R. 4-2(b). As to the JCCS, Patent Local Rule 4-3 provides that the JCCS "shall contain . . . an identification of any extrinsic evidence known to the party on which it intends to rely either to support its proposed construction or to oppose any other party's proposed construction, including . . . expert witnesses." Patent L.R. 4-3(b).

Cisco now urges the Court to exclude Dr. Menascé's declaration due to Ipsilium's failure to comply with these local rules. Ipsilium opposes this request on several grounds. First, Ipsilium hopes to turn the tables and argue that Cisco is the party who has not followed the local rules. For example, Ipsilium claims that in the August 15 disclosures, Cisco raised several indefiniteness allegations for the first time, which purportedly "forc[ed] Ipsilium to address those elements for the first time in its Opening Claim Construction Brief." Opp. at 3. According to Ipsilium, Cisco's evasive tactics violated the local rules requirement to provide detailed disclosure of invalidity contentions. *Id.* at 4. But Ipsilium admits that it took no action in response to Cisco's allegedly deficient disclosures: "Rather than engage in time-consuming motion practice as to Cisco's insufficient invalidity disclosures, Ipsilium preferred to resolve this issue on the merits." *Id.*

The Court rejects Ipsilium's allegation of hypocrisy as irrelevant to the pending motion. First, Cisco's compliance, or noncompliance, with the local rules has nothing to do with Ipsilium's tactics. Second, and more important, even if Cisco's August 15 disclosure surprised Ipsilium, at most that might have justified Ipsilium's failure to disclose Dr. Menascé in its own August 15 disclosure, as required by Patent Local Rule 4-2. But that does not explain why Ipsilium failed to disclose Dr. Menascé in the JCCS, as required by Patent Local Rule 4-3, which the parties filed over two weeks later.

Ipsilium next argues that Dr. Menascé's report is only meant to rebut opinions offered by

4

1   Cisco's expert, Dr. Almeroth. *Id.* at 4. And Ipsilium contends that Patent Local Rule 4-3 does not

2   require disclosure of a rebuttal expert. *Id.* But Ipsilium's interpretation of the rule is incorrect:

3   Patent Local Rule 4-3 plainly requires the disclosure of expert testimony "on which [the party]

4   intends to rely *either* to support its proposed construction *or to oppose any other party's proposed*

5   *construction.*" Patent L.R. 4-3(b) (emphasis added).[2]

6   Finally, Ipsilium asks the Court to deny the motion because Cisco failed to meet and

7   confer before submitting the motion, as required by Local Rule 37-1. Ipsilium argues that, in

8   violation of that rule, "Cisco did not raise any objection to [Dr. Menascé's] declaration for two

9   weeks." *Id.* at 5. Rather, Cisco told Ipsilium it intended to file the present motion the same day it

10   in fact filed the motion, when Ipsilium's lead counsel was busy. *Id.* In response, Cisco notes that

11   it provided Ipsilium with ample warning of the present motion in the JCCS, where it said in plain

12   terms that Cisco would oppose untimely expert disclosure. *See* Dkt. No. 51 at 2 n.1. Moreover,

13   Ipsilium's failure to respond to Cisco's email the day Cisco filed this motion does not mean Cisco

14   did not attempt to meet and confer.

15   Because Ipsilium failed to comply with a court order requiring the disclosure of expert

16   testimony by a certain date, the Court cannot consider Dr. Menascé's declaration absent

17   "substantial justification" or a showing of harmlessness. *See* Fed. R. Civ. Proc. 37(c)(1); *Jarritos,*

18   *Inc. v. Reyes*, 345 F. App'x 215, 217 (9th Cir. 2009) (affirming exclusion of late-filed expert

19   reports); *Yeti*, 259 F.3d at 1106. The burden of showing substantial justification or harmlessness

20   falls on Ipsilium. *See R & R Sails, Inc.*, 673 F.3d at 1246. But for the reasons set forth above, the

21   Court finds that Ipsilium's conduct was not substantially justified, as it knowingly violated the

22   Patent Local Rules. The Court also finds that Ipsilium's delay in filing Dr. Menascé's declaration

23   was not harmless. Ipsilium's disclosure came after the close of claim construction discovery, and

24   "[d]isruption to the schedule of the court and other parties . . . is not harmless." *Wong v. Regents*

25

26   ───────────────

27   [2] Ipsilium separately argues that due process demands Ipsilium be "afforded the opportunity to see the evidence presented against it and prepare a response." *Id.* at 5–6. But Ipsilium fails to cite any binding authority to suggest that compliance with the Patent Local Rules somehow deprives parties of their due process rights. And to the extent Ipsilium's position is that compliance with the Patent Local Rules violates its due process rights, the Court rejects that argument.

28

1 *of Univ. of Cal.*, 410 F.3d 1052, 1062 (9th Cir. 2005).

2   For these reasons, the Court **GRANTS** Cisco's motion to strike.

3 **II.   CLAIM CONSTRUCTION**

4   **A.   Legal Standard**

5   Claim construction is a question of law to be determined by the Court. *Markman v.*

6 *Westview Instruments, Inc.*, 517 U.S. 370, 384 (1996). "The purpose of claim construction is to

7 determine the meaning and scope of the patent claims asserted to be infringed." *O2 Micro Int'l*

8 *Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) (quotation omitted).

9   Generally, claim terms should be "given their ordinary and customary meaning"—in other

10 words, "the meaning that the term[s] would have to a person of ordinary skill in the art in question

11 at the time of the invention." *Phillips v. AWH Corp.,* 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en

12 banc) (quotation omitted). There are only two circumstances where a claim is not entitled to its

13 plain and ordinary meaning: "1) when a patentee sets out a definition and acts as his own

14 lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the

15 specification or during prosecution." *Thorner v. Sony Comput. Entm't Am. LLC*, 669 F.3d 1362,

16 1365 (Fed. Cir. 2012).

17   When construing claim terms, the Federal Circuit emphasizes the importance of intrinsic

18 evidence such as the language of the claims themselves, the specification, and the prosecution

19 history. *Phillips*, 415 F.3d at 1312–17. The claim language can "provide substantial guidance as

20 to the meaning of particular claim terms," both through the context in which the claim terms are

21 used and by considering other claims in the same patent. *Id.* at 1314. The specification is likewise

22 a crucial source of information. *Id.* at 1315–17. Although it is improper to read limitations from

23 the specification into the claims, the specification is "the single best guide to the meaning of a

24 disputed term." *Id.* at 1315 (noting that "the specification is always highly relevant to the claim

25 construction analysis," and that "[u]sually, it is dispositive" (quotation omitted)); *see also Merck*

26 *& Co. v. Teva Pharm. USA, Inc.,* 347 F.3d 1367, 1371 (Fed. Cir. 2003) (explaining that "claims

27 must be construed so as to be consistent with the specification").

28   Despite the importance of intrinsic evidence, courts may also consider extrinsic evidence—

United States District Court
Northern District of California

technical dictionaries, learned treatises, expert and inventor testimony, and the like—to help construe the claims. *Phillips*, 415 F.3d at 1317–18. For example, dictionaries may reveal what the ordinary and customary meaning of a term would have been to a person of ordinary skill in the art at the time of the invention. *Frans Nooren Afdichtingssystemen B.V. v. Stopaq Amcorr Inc.,* 744 F.3d 715, 722 (Fed. Cir. 2014) ("Terms generally carry their ordinary and customary meaning in the relevant field at the relevant time, as shown by reliable sources such as dictionaries, but they always must be understood in the context of the whole document—in particular, the specification (along with the prosecution history, if pertinent)."). Expert testimony can also help "to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Phillips*, 415 F.3d at 1318. Extrinsic evidence is, however, "less significant than the intrinsic record in determining the legally operative meaning of claim language." *Id.* at 1317 (quotation omitted).

B. Disputed Terms

1. "reply packet" ('681 Patent and '777 Patent)

Ipsilium's Construction	Cisco's Construction
"a packet in response to a received packet"	Plain and Ordinary Meaning (No construction necessary) To the extent the Court determines that a construction is required, the plain and ordinary meaning of "reply packet" is "a responsive packet that is not a forward"

The Court finds no construction is necessary, but that the plain and ordinary meaning is not limited to packets directed back to the originator of the received fields.

This disputed term appears in independent claims 2, 18, 31, 44, 49, 54, and 55 of the '681 Patent, as well as independent claims 44, 49, 54, and 55 and dependent claims 2, 18, and 31 of the '777 Patent. Am. JCCS at 1–2. Claim 54 of the '681 Patent is representative of how the term is used in the claim language:

//

//

7

Claim 54

54. A computer-readable medium that stores instructions executable by one or more processors to perform a method for generating responses to packets having a plurality of fields, the packets being broken into one or more packets, before the packets are entirely received, the method comprising:
 	
  receiving one or more fields of the packet;
 	
  predicting one or more other fields of the packet before the one or more other fields are received; and
 	
  generating a **reply packet** based on the one or more received fields and the predicted one or more other fields.

Ipsilium has consistently asked the Court to construe "reply packet" as "a packet in response to a received packet." Op. Br. at 6–9; Reply Br. 1–3; Am. JCCS at 1. Cisco, on the other hand, has advanced several positions. Initially, Cisco proposed that "reply packet" ought to mean "[r]esponsive packet directed to received field's source." *See* JCCS Ex. A, at 1. In its opposition brief, however, Cisco retreated from its first proposal and argued that although it "initially proposed [in the JCCS] that 'reply packet' be construed as 'responsive packet directed to received field's source,' which is consistent with the term's plain and ordinary meaning," Cisco since determined that no construction is necessary and that the Court should give "reply packet" its plain and ordinary meaning. Resp. Br. 3–6. Cisco purportedly changed course "in the interest of streamlining this dispute." *Id.* at 3.

At the *Markman* hearing, the parties' dispute over this term crystalized at last: The parties disagree about where a reply packet may be sent and still qualify as a "reply." Cisco argues that a "reply packet" cannot mean a packet that is forwarded. *Markman* Tr. 56:17–20 ("I believe -- I guess one way to phrase it would be that 'a reply excludes a forward.' 'A reply packet is a -- a responsive packet that is not a forward' or something to that effect."); *see also* Am. JCCS at 1 (setting forth Cisco's current proposed construction). Ipsilium, on the other hand, continues to argue that a "reply packet" may be directed at the source of the received field or to other communication devices. *Markman* Tr. 52:7–9 ("In other instances, most instances, an incoming packet is forwarded to another destination, another device, that is -- or is closer to its ultimate -- the packet's ultimate destination.").

The Court finds that Cisco's newest position—that no construction is necessary and the

1   plain and ordinary meaning of a "reply packet" is "a responsive packet that is not a forward"—is

2   no more than a repackaging of Cisco's initial proposal—that a "reply packet" is a "responsive

3   packet directed to received field's source." Broadly speaking, the claimed invention encompasses

4   a method for receiving information, generating a "reply packet," and transmitting the "reply

5   packet" to its destination. As a matter of logic, the "reply packet" can only be transmitted to one

6   of two places: (1) back to the originator of the received information, or (2) somewhere else. To

7   transmit the "reply packet" somewhere else, however, is precisely what Ipsilium contemplated

8   when it spoke of "forwarding" at the *Markman* hearing. In turn, whether Cisco maintains that the

9   reply packet (a) must be directed to the received field's source, or (b) must not be directed

10   elsewhere, is logically the same position.

11   It is unhelpful that Ipsilium used the term "forward" at the *Markman* hearing, because in a

12   real sense the reply packet is never "forwarded," for present purposes. To "forward" implies a

13   passing along wholesale of some material or information. Here, however, the communication

14   device itself generates the reply packet before transmitting it elsewhere. The reply packet is thus

15   not "forwarded" in the traditional sense of the word. And for this reason, the Court finds it

16   unsurprising that the word "forward" appears nowhere in the Asserted Patents—as pointed out by

17   Cisco at the *Markman* hearing. *Id.* 53:22–54:2 ("But the more important point I just want to raise

18   is that counsel, in his argument a moment ago, just used a word that hadn't come up at all before

19   and, in fact, doesn't appear in the patent ever, which is 'forward.' I just did a search on the patent

20   on my iPad. It's text-recognized. The word 'forward' never comes up once in the patent."). It is

21   clear to the Court that Plaintiff's counsel's use of the term "forward" at the *Markman* hearing was

22   simply an inelegant way of expressing that Ipsilium does not believe a "reply packet" must be

23   directed to the received field's source, a position Ipsilium has maintained since its opening claim

24   construction brief. *See* Op. Br. at 6–9.

25   With the parties' dispute properly framed, the question is whether a reply packet's

26   destination may be somewhere other than the received field's source. Although the word "reply"

27   often connotes a sense of directionality back to the source of whatever triggered the need for a

28   reply—e.g., when one "replies" to an email, that necessarily means one received an email and is

9

1 responding back to the received email's originator—that is not necessarily a universal truth,

2 especially in the realm of network technology. To the contrary, a person having ordinary skill in

3 the art of network technology could understand that a "reply packet," for present purposes, may be

4 directed to either the received field's source or elsewhere, because the Asserted Patents'

5 specifications often describe "reply packets" directed to destinations other than the received field's

6 source. For example, the '777 Patent contemplates that—among other possible fields—received

7 packets would have separate "source" and "destination" fields. *See, e.g.*, '777 Patent, 6:29–31

8 ("The source and destination address fields include addresses, such as Internet addresses, of the

9 source and destination, respectively."); *see also* '777 Patent Fig. 6 (showing separate "destination

10 address" and "source address" fields). The '777 Patent then describes the creation of a reply

11 packet, which is sent to its destination:

12
13
14

> The processor **220** then processes the packets as necessary in accordance with the predictions [step **720**]. For example, the processor **220** may begin preparing a reply packet based on the received and predicted fields and begin transmitting the reply packet to the destination (e.g., a communication device **110**).

15

16 '777 Patent, 8:4–9. Taken together, it would make little sense to mention several times that a

17 received packet contains separate source and destination fields—and more important, explain that

18 reply packets are prepared and transmitted based on such fields—if it was only ever contemplated

19 that a "reply packet" would be sent back to the source. This intrinsic evidence instead

20 demonstrates that "reply packets" were never meant to be limited to packets directed back to the

21 originator of the received fields, and the Court will not now impose that narrower construction.

22 For these reasons, although the Court agrees that "reply packet" should be given its plain

23 and ordinary meaning, to eliminate any confusion, the Court finds that the plain and ordinary

24 meaning of "reply packet" is not limited to packets directed back to the originator of the received

25 fields.

26 //

27 //

28 //

2. "means for obtaining one of the fields of the packet" ('681 Patent and '777 Patent)

Ipsilium's Construction	Cisco's Construction
Function: obtaining one of the fields of the packet **Structure**: a communication interface (any transceiver-like mechanism that enables the communication device to communicate with the other devices and systems on the network), and a processor or microprocessor executing instructions, hardwired circuitry, or silicon via combination of logic gates. Further, to the extent the disclosed structure is a processor or microprocessor executing instructions and that structure is held to require a corresponding algorithm, the algorithm disclosed by the specification is: • '681 Patent at Fig. 7A, 9, and 10 and accompanying specification descriptions, 8:33–42 • Provisional at Fig. 4 and accompanying descriptions • '777 Patent, Fig. 7A and accompanying specification descriptions, 7:32–34	**Function**: obtaining one of the fields of the packet **Structure ('681 Patent)**: the "communication interface" disclosed at Col. 4:60–61. **Structure ('777 Patent)**: the "communication interface" disclosed at Col. 4:7–8.

The Court adopts Cisco's construction.

The disputed term appears in independent claim 16 of the '681 Patent and independent claim 16 of the '777 Patent. Am. JCCS at 8–9, 12–13. Claim 16 of the '681 Patent is representative of how the term is used in the claim language:

Claim 16
16. A system for predicting one or more fields of a packet having a plurality of fields, the packet belonging to a set of packets, each of the fields containing data representing a value, the system comprising: **means for obtaining one of the fields of the packet**; means for determining a first value of the obtained field; means for predicting a second value of one or more other fields of the packet based on a correlation between the first value and a property of one or more other fields before the one or more other fields are obtained; and

> means for processing the packet based on the obtained field and the predicted one or more
> other fields.

The parties agree that this is a means-plus-function term subject to 35 U.S.C. § 112 ("Section 112"). A claim invokes Section 112 if the claim limitation is drafted in the means-plus-function format. *See Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1097 (Fed. Cir. 2014) ("The use of the term 'means' triggers a rebuttable presumption that § 112, ¶ 6 governs the construction of the claim term."). Here, the term expressly includes the word "means."

Given that Section 112 applies, the Court's analysis is two-fold: The Court (1) identifies the claimed function; and then (2) determines what structure, if any, is disclosed in the specification that corresponds to these functions. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1351–52 (Fed. Cir. 2015). Structure disclosed in the specification must be "corresponding structure," which is satisfied "if the intrinsic evidence clearly links or associates that structure to the function recited in the claim." *Id.* at 1352. Even where structure is corresponding, it must also constitute "adequate corresponding structure to achieve the claimed function." *Id.* (quotation omitted). Where functions "can be performed by a general purpose processor," the written description need not disclose an algorithmic structure for implementing the claimed function. *In re Katz*, 639 F.3d 1303, 1317 (Fed. Cir. 2011). If, instead, functions "constitute specific computer-implemented functions," then "corresponding algorithms must be disclosed." *Id.*

The parties agree that the claimed function is "obtaining one of the fields of the packet." *See, e.g.*, Am. JCCS at 8–9. The parties then agree that the structure corresponding to the claimed function at least includes the "communication interface." *See, e.g.*, *id.* Ipsilium, however, contends that the structure also includes "a processor or microprocessor executing instructions, hardwired circuitry, or silicon via combination of logic gates." *Id.* And Ipsilium argues that this broader structure is disclosed in (1) claim 49 of the '681 Patent, which refers to "a memory configured to store instructions for obtaining one or more fields of the packet" and "a processor configured to execute the instructions in the memory"; (2) claim 57 of the '681 Patent, which refers to "logic configured to receive one or more fields of the packet"; and (3) Figure 7A of the '681 Patent, which notes that the "processor receives each field." *See* Op. Br. at 10; '681 Patent

United States District Court
Northern District of California

Fig. 7A, 15:45–53, 16:52–53.[3] Finally, Ipsilium contends that although no algorithm is necessary,

the specification discloses a sufficient algorithm for the processor structure. Op. Br. at 11.

The Court finds the structure is limited to the communication interface, because any

broader construal of the structure lacks a necessary corresponding algorithm. As a threshold

matter, "obtaining" conceivably could mean something broad and thus capable of performance by

a general purpose processor, which would not require disclosure of an algorithmic structure. But

insofar as "obtaining" refers to a "narrower" concept requiring specific computer-implemented

functions, a corresponding algorithm is necessary. *See In re Katz*, 639 F.3d at 1316.

When this framework is applied, Ipsilium's arguments crumble. To the extent "obtaining

one of the fields of the packet" means broadly obtaining fields of packets, the communication

interface undisputedly performs that function. All language that Ipsilium contends discloses a

more expansive structure refers to a narrower sense of "obtaining," which requires specific

computer-implemented functions and thus a corresponding algorithm is necessary. For example,

both claim 49 and claim 57 refer to some configuring or programming, which would require

computer-implemented functions.[4] *See* '681 Patent, 15:45–53, 16:52–53. And contrary to

Ipsilium's contention, the specification does not disclose a sufficient algorithm for the processor

structure. Although Ipsilium cites to two portions of the specification for the '681 Patent, each

portion merely recites functional language that in no sense details how a processor would obtain

one of the fields of the packet. *See* '681 Patent Fig. 7A, Step 710 (providing that the "processor

receives each field and analyzes value in field"), 8:39–41 ("The processor . . . received each field

of the packet . . . and analyzes the value in the fields [step **710**]."); *see also Ergo Licensing, LLC v.*

CareFusion 303, Inc., 673 F.3d 1361, 1365 (Fed. Cir. 2012) (holding that mere functional

---

[3] As additional support, Ipsilium notes that Cisco's U.S. Patent No. 6,985,964 discloses that "[c]entral processor 110 receives packets through any of a number of means well-known in the art." Op. Br. at 11. The Court finds, however, that Ipsilium waived its ability to rely on Cisco's patent here because Ipsilium did not include this extrinsic evidence in its joint statement.

[4] Cisco argues that Ipsilium may not rely on separate claims for corresponding structure. Resp. Br. at 7. Because the Court finds the separate claims would not provide corresponding structure, it need not determine now whether it is generally improper for separate claims to provide corresponding structure.

language, which "[did] not contain any step-by-step process" was insufficient).

        3.   **"means for predicting a second value of one or more other fields of the packet based on a correlation between the first value and a property of one or more other fields before the one or more other fields are obtained" (the '681 Patent) / "means for predicting how the packet will be processed by upper level protocols, application protocols or both based on the value of the obtained field and further predicting a value of at least one other field of the packet not yet received based on the prediction of how the packet will be processed" (the '777 Patent)**

Ipsilium's Construction	Cisco's Construction
Function: predicting a second value of one or more other fields of the packet based on a correlation between the first value and a property of one or more other fields before the one or more other fields are obtained ('681 Patent) / predicting how the packet will be processed by upper level protocols, application protocols or both based on the value of the obtained field and further predicting a value of at least one other field of the packet not yet received based on the prediction of how the packet will be processed ('777 Patent)	**Function**: predicting a second value of one or more other fields of the packet based on a correlation between the first value and a property of one or more other fields before the one or more other fields are obtained ('681 Patent) / predicting how the packet will be processed by upper level protocols, application protocols or both based on the value of the obtained field and further predicting a value of at least one other field of the packet not yet received based on the prediction of how the packet will be processed ('777 Patent)
Structure: a processor or microprocessor executing instructions, hardwired circuitry, silicon via combination of logic gates. Further, to the extent the disclosed structure is a processor or microprocessor executing instructions and that structure is held to require a corresponding algorithm, the algorithm disclosed by the specification is predicting due to:	**Structure**: a processor or microprocessor executing instructions and/or hardwired circuitry, silicon via combination of logic gates implementing the following algorithms: predicting due to:
'681 Patent • fragmentation ('8:64–9:7); • segmentation (9:18–32); • IP packet length (Prov. Appl. at IP000228–229); or • sequence number (Prov. Appl. at IP000071).	'681 Patent • fragmentation (8:64–9:7); • segmentation (9:18–32); • IP packet length (Prov. Appl. at IP000228–229); or • sequence number (Prov. Appl. at IP000071).
'777 Patent • protocol field (7:33–8:3);	'777 Patent • protocol field (7:33–8:3);

• flags field (7:33–8:3) • IP packet length (Prov. Appl. at IP000228–229); or • total length (Prov. Appl. at IP000412).	• flags field (7:33–8:3) • IP packet length (Prov. Appl. at IP000228–229); or • total length (Prov. Appl. at IP000412).

The Court adopts Cisco's construction.

The disputed term appears in independent claim 16 of the '681 Patent and independent claim 16 of the '777 Patent. Am. JCCS at 10–11, 14–15. Claim 16 of the '681 Patent is representative of how the term is used in the claim language:

Claim 16
16. A system for predicting one or more fields of a packet having a plurality of fields, the packet belonging to a set of packets, each of the fields containing data representing a value, the system comprising: means for obtaining one of the fields of the packet; means for determining a first value of the obtained field; **means for predicting a second value of one or more other fields of the packet based on a correlation between the first value and a property of one or more other fields before the one or more other fields are obtained**; and means for processing the packet based on the obtained field and the predicted one or more other fields.

As discussed at the *Markman* hearing and confirmed in the parties' supplemental briefs, although the parties once had several disagreements regarding this term, they have since narrowed their dispute significantly. *See Markman* Tr. 94:22–98:7; Pl.'s Supp. Br. at 7; Def.'s Supp. Br. at 1–3. The only remaining dispute concerns whether "hardwired circuitry" and "silicon via combination logic gates" as structure require an algorithmic disclosure. Ipsilium argues that under *Katz*, such "specialized hardware" is "distinct from a general-purpose computer and therefore [is] not limited to the algorithms disclosed in the patents—as only microprocessor and/or software claims require algorithms for non-generic functions." Pl.'s Supp. Br. at 7. Cisco disagrees with Ipsilium's characterization of *Katz* and counters that "because special programming is necessary to implement the claim limitation, an algorithm is required regardless of whether that programming occurs via a software or hardwiring." Def.'s Supp. Br. at 2.

The Court finds Cisco's arguments more persuasive. To start, *Katz* nowhere set forth Ipsilium's purported distinction. If anything, *Katz* weighed against such a conclusion: "If a

function's corresponding structure is a type of computer or processor, indefiniteness analysis does not turn on the name of the structure that does the processing." 639 F.3d at 1317. As the Federal Circuit there explained, "[t]he key inquiry is whether one of ordinary skill in the art would understand the patent to disclose structure that sufficiently corresponds to the claimed function, which in the case of a specific function implemented on a general purpose computer requires an algorithm." *Id.* Turning then to the Asserted Patents, the Court finds that the specifications disclose that special programming is necessary to implement the claimed invention, whether the programming is executed through software or hardwiring. For example, as detailed in the '681 Patent:

> The instructions may be read into local memory **230** for another computer-readable medium or from another device via the communication interface **260**. Execution of the sequences of instructions contained in local memory **230** causes processor **220** to perform processes that will be described later. Alternatively, hardwired circuitry may be used in place of or in combination with software instructions to implement processes consistent with the present invention.

'681 Patent, 5:34–42. As this excerpt demonstrates, some special programming is always necessary to implement the claimed invention—be it through software or hardwiring—which requires an algorithm.

Because the parties' sole dispute concerns the proper interpretation of *Katz* on this narrow point, which the Court resolves in Cisco's favor, the Court accordingly adopts Cisco's construction.

    4.   **"means for processing the packet based on the obtained field and the predicted one or more other fields" ('681 Patent) / "means for processing the packet based on at least the obtained field and the predicted at least one other fields" ('777 Patent)**

Ipsilium's Construction	Cisco's Construction
Function: processing the packet based on the obtained field and the predicted one or more other fields ('681 Patent) / processing the packet based on at least the obtained field and the predicted at least one other fields ('777 Patent)	**Function**: processing the packet based on the obtained field and the predicted one or more other fields ('681 Patent) / processing the packet based on at least the obtained field and the predicted at least one other fields ('777 Patent)

Structure: a processor or microprocessor executing instructions, hardwired circuitry, or silicon via combination of logic gates. Further, to the extent the disclosed structure is a processor or microprocessor executing instructions and that structure is held to require a corresponding algorithm, the algorithm disclosed by the specification is: • '681 Patent at Fig. 7A, 7B and accompanying specification descriptions; 9:37–9:43 • Provisional at Title; at 3–8; IP000223–230; Fig. Fig. 4 and accompanying descriptions • '777 Patent at Fig. 7A, 7B, Fig. 9, Fig. 10 and accompanying specification description; 8:4–11; 8:47–51	**Structure**: Indefinite for failing to disclose a structure that performs the claimed function.

The Court adopts Cisco's construction and finds the term indefinite for failing to disclose a structure that performs the claimed function.

The disputed term appears in independent claim 16 of the '681 Patent and independent claim 16 of the '777 Patent. Am. JCCS at 11–12. Claim 16 of the '681 Patent is representative of how the term is used in the claim language:

Claim 16

16. A system for predicting one or more fields of a packet having a plurality of fields, the packet belonging to a set of packets, each of the fields containing data representing a value, the system comprising:
 	
    means for obtaining one of the fields of the packet;
 	
    means for determining a first value of the obtained field;
 	
    means for predicting a second value of one or more other fields of the packet based on a correlation between the first value and a property of one or more other fields before the one or more other fields are obtained; and
 	
    means for processing the packet based on the obtained field and the predicted one or more other fields.

The parties dispute whether the patent adequately discloses a structure that performs the claimed function. Ipsilium's proposed structure is "a processor or microprocessor executing instructions, hardwired circuitry, or silicon via combination of logic gates." Op. Br. at 16. As to

17

1   the purported "hardwired circuitry or silicon via a combination of logic gates" structure, Ipsilium

2   again argues that no algorithm is required under *Katz*. *Id.* at 17. As to the processor structure,

3   Ipsilium contends that (1) the specification need not disclose an algorithm because the function of

4   "processing" is generic and thus does not "require special programming"; and (2) even if an

5   algorithm is required, the specification discloses an algorithm through Figure 7A and Column

6   4:35–41. *Id.*

7   Starting with the "hardwired circuitry or silicon via a combination of logic gates" structure,

8   and for reasons detailed above, the Court finds that an algorithm is required. *See supra* II.3. As to

9   the "processor" function, the Court finds that *Katz*'s narrow exception does not apply, because

10   "processing the packet based on the obtained field and the predicted one or more other fields" is

11   not coextensive with a general purpose microprocessor. Although *Katz* held that "processing" was

12   a generic function, the claim here calls for processing "based on the obtained field and predicted

13   one or more other fields," which requires some special programming. *Cf. Katz*, 639 F.3d at 1316.

14   In fact, by calling for the processor to process the packet "based on" certain information, the

15   agreed function is instead a narrower sort of "processing," which *Katz* explained requires an

16   algorithm. *Katz*, 639 F.3d at 1315 (finding several claims "clearly indefinite" because they

17   "contain[ed] a means-plus-function limitation that recites a 'processing means . . . for receiving

18   customer number data entered by a caller and for storing the customer number data . . . and based

19   on a condition coupling an incoming call to the operator terminal, the processing means visually

20   displaying the customer number data,'" where the patents "[did] not disclose an algorithm that

21   corresponds to the 'based on a condition coupling an incoming call to the operator terminal'

22   function").

23   The Court next finds that the Asserted Patents do not disclose a corresponding algorithm.

24   First, Figure 7A only provides that the "processor processes packet as necessary," which is

25   inadequate functional language, as it does not show "*how* the [processor] can be programmed to

26   perform the claimed function." *Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d

27   1328, 1333 (Fed. Cir. 2008). Second, Column 4:35–41 states, in full:

28   //

18

> In one implementation consistent with the present invention, the network **120** includes a packet-based network that operates according to a communications protocol, Such as Transmission Control Protocol and all related protocols, as specified in "Requirements for Internet Hosts Communication Layers," RFC1122, ftp://ftp.lisi.edu/innotes/rfc1122.txt, October 1989.

'681 Patent, 4:35–41. But nowhere does this passage even reference the processor, nonetheless disclose an algorithm.

Accordingly, the Court finds the term indefinite for failure to disclose a necessary corresponding algorithm.

5. "predicting a [second] value of at least one other field of the packet not yet received" ('681 Patent and '777 Patent)[5]

Ipsilium's Construction	Cisco's Construction
No construction necessary.	"predicting a [second] value of at least one other field of the packet before that field is received" (*with minor variations as necessary to account for slight differences in claim language*)

The Court adopts Cisco's construction.

The disputed terms appear in independent claims 1 and 2 of the '681 Patent and independent claims 1 and 14 of the '777 Patent. Am. JCCS at 4–6. Claim 1 of the '681 Patent is representative of how the term is used in the claim language:

Claim 1

1. A method for predicting one or more fields of a packet having a plurality of fields, the packet belonging to a set of packets, each of the fields containing data representing a value, the method comprising:
 	
   receiving one or more of the fields of the packet;
 	
   analyzing a first value of at least one of the received fields;
 	
   predicting a second value of at least one other field of the packet not yet received, based on a correlation between the first value and a property of the at least one other field not yet received; and

---

[5] The parties' amended joint claim construction statement refers to both this version of the claim term and "predict a [second] value of one or more other fields not yet received." Am. JCCS at 4–5. The parties, however, have now narrowed the dispute to four claims, none of which include this alternate version.

> processing the packet based on the one or more received fields and the predicted at least one other field.

The parties' dispute regarding this term only crystalized at the *Markman* hearing and through supplemental briefing. As it now stands, Ipsilium contends that the language "not yet received," as used in the disputed claims, applies to "packet."[6] *See* Pl.'s Supp. Br. at 3. Cisco, on the other hand, contends that "not yet received" must apply to "field," and that by adopting Cisco's proposed construction, the Court could remove any ambiguity on this point. *See* Def.'s Supp. Br. at 3–6. And Cisco primarily asks the Court to reject Ipsilium's "plain meaning" interpretation because to construe "not yet received" as applying to "packet" would introduce at least two antecedent-basis errors. *Id.* at 5–6. First, Ipsilium's reading removes the antecedent basis for "***the*** packet," because "there is no packet earlier in the claim that has not yet been received." *Id.* at 5. Second, Ipsilium's position eliminates the antecedent basis for "***the*** at least one other field not yet received" from the correlation clause. *Id.* at 5–6.

Although Cisco discussed both of these antecedent-basis criticisms at the *Markman* hearing, *see Markman* Tr. 19:20–20:19, Ipsilium in its supplemental brief only proposed a reading of the claim to ameliorate the second of Cisco's antecedent-basis concerns:

> The "correlation" language recites, "the at least one other field," and the antecedent basis comes earlier in the claim, "predicting a second value of at least one other field." No problem. The "not yet received" later independently modifies the "the at least one other field" that is part of "correlation." That does not mean, as Cisco argues, the previous "at least one other field" must also recite the phrase "not yet received." Indeed, following Cisco's reasoning would still not solve the alleged problem, as Cisco's construction still points to "the field." Instead, Cisco's circular logic requires the prior language of "a field not yet received," which does not exist. In any event, that is not how antecedent basis works, and more importantly, that is not what the claim language says. The claim language uses the phrase "packet not yet received" in the predicting limitation and "field not yet received" in the separate, correlation limitation. The phrase "not yet received" modifies different nouns. This language is easily understood and does not lead to indefiniteness due to an antecedent basis problem.

---

[6] At the *Markman* hearing, Ipsilium stated that "not yet received" could apply to either "packet" or field." *Markman* Tr. 26:3–7. Ipsilium's supplemental briefs clarified that it believes "not yet received" applies to just "packet" in the four disputed claims. Pl.'s Supp. Br. at 3 ("Ipsilium proposes a plain meaning, that 'predicting' . . . occurs . . . before the packet containing the predicted value of the field is received ('681 Claims 1, 2; '777 Claims 1, 14).").

Pl.'s Supp. Br. at 6. As tortured as this reading might be, if this were the only antecedent-basis issue, the Court might side with Ipsilium's reading of the claim. The Court, however, finds that no fair reading of the "predicting" limitation would provide an antecedent basis for "*the* packet," if the Court were to adopt Ipsilium's position. Claim 1 nowhere previously speaks of an unreceived packet. Rather, the claim speaks of "a packet" in the preamble, which provides an antecedent basis for both "the packet" from which a field is received and "the packet," which Ipsilium now maintains is not yet received. But Ipsilium cannot have it both ways: "the packet" cannot both (1) already have been received and provide a field and (2) not be received. Ipsilium provides no justification for this internally inconsistent "plain meaning" reading.

For these reasons, the Court adopts Cisco's construction. Because the parties have narrowed their dispute to four claims, the Court sets forth the following chart to quickly summarize how Cisco's construction applies to each:

'681 Patent, Claim 1
predicting a second value of at least one other field of the packet before that field is received
'681 Patent, Claim 2
predicting a value of at least one other field of the packet before that field is received
'777 Patent, Claim 1
predicting a value of at least one other field of the packet before that field is received
'777 Patent, Claim 14
predicting a value of at least one other field of the packet before that field is received

//

6. "correlation" terms ('681 Patent)

Ipsilium's Construction	Cisco's Construction
No construction necessary.	"based on a correlation between the first received value and a property of the not yet received field"

The Court finds no construction is necessary, but that the plain and ordinary meaning does not permit the first correlate to be an unreceived field.

The disputed terms appear in independent claims 1, 16, 17, 18, 30, and 57 of the '681

21

Patent. Am. JCCS at 6–7. Claim 1 is generally representative of how the term is used in the claim language:

Claim 1

1. A method for predicting one or more fields of a packet having a plurality of fields, the packet belonging to a set of packets, each of the fields containing data representing a value, the method comprising:
 	
  receiving one or more of the fields of the packet;
 	
  analyzing a first value of at least one of the received fields;
 	
  predicting a second value of at least one other field of the packet not yet received, **based on a correlation between the first value and a property of the at least one other field not yet received**; and
 	
  processing the packet based on the one or more received fields and the predicted at least one other field.

The other claims' language, however, differ slightly:

Claim 16
. . . **based on a correlation between the first value and a property of one or more other fields before the one or more other fields are obtained**; and

Claim 17
. . . **based on a correlation between the first value, and a property of one or more other fields not yet received** . . . .

Claim 18
. . . **based on a correlation between the first value and a property of one or more other fields not yet received** . . . .

Claim 30
. . . **based on a correlation between at least one of the one or more obtained fields and a property of at least one other field before the at least one other field is received**;

Claim 57
. . . **based on a correlation between the first value and a property of one or more other fields before the one or more other fields are received**; and

In the claim construction briefing, the parties disputed whether it was unclear which text is modified by the phrase "not yet received." *See, e.g.*, Resp. Br. at 19. According to Cisco, "not yet received" in claim 1 might modify "first value," "property," and/or "field." *Id.* Cisco then argued that its redrafting "confirms that the required correlation is between (1) the first received value (in other words, the first value that has already been received) on the one hand, and (2) a property of

1   the not yet received field on the other hand." *Id.* Ipsilium responds that Cisco is simply

2   "manufactur[ing] confusion" here. Reply Br. at 13. From Ipsilium's perspective, the only fair

3   reading is that "not yet received" modifies "field." *Id.*

4   The Court finds that no reasonable reading of claim 1 would find that "not yet received"

5   modifies anything other than "field." To start, claim 1 sets out two correlates separated by the

6   conjunction "and." It would make no grammatical sense for "not yet received" to modify the

7   correlate on the other side of the conjunction: "first value." Focusing on the proper correlate—"a

8   property of the at least one other field"—Cisco's argument requires finding ambiguity as to

9   whether the modifier phrase "not yet received" relates to "property" or "field." Were "not yet

10   received" to modify "property," however, the modifier phrase would be misplaced. More

11   important, intrinsic evidence shows that it only makes sense for "not yet received" to modify

12   "field." For example, whereas the '681 Patent describes "receiving" fields numerous times, it

13   never once mentions receiving a property. *See, e.g.*, '681 Patent 3:5–7 ("The system receives one

14   or more fields of one or more packets and determines the value of at least one of the received

15   fields."). It is thus clear that "not yet received" modifies "field," and the Court need not redraft

16   the claim language to remove artificial confusion.

17   Although the claim construction briefing focused on the modifier phrase "not yet

18   received," a separate dispute emerged in Ipsilium's reply brief and at the *Markman* hearing. This

19   new dispute concerns whether the Court should find that "the first value" really means "the first

20   <u>received</u> value." Cisco argued that, as written, it is ambiguous whether "the first value" has been

21   received, but that its prior reception "is a necessary element of the claim." *Markman* Tr. 31:13–

22   20. As support, Cisco notes that the specification only speaks of the first correlate as having

23   already been received. *See* '681 Patent, 7:44–49 ("This may be accomplished because the packets

24   received by the communication device **110** have useful correlation, or correlations, between some

25   fields that have already been received and some other fields in the packet that have yet to arrive.").

26   Cisco further stresses that limiting the first correlate to something already received was added

27   during the prosecution history, to overcome a Section 103 rejection. *Markman* Tr. 32:9–13.

28   Ipsilium, on the other hand, contends that it would be improper to read in a "received" limitation,

23

1   because "the claimed correlation is with a 'first value,' independent of whether or not it is

2   received." Reply Br. at 14.

3   The Court agrees that Ipsilium's position before the patent office to overcome a Section

4   103 rejection sufficiently contradicts its current position to meet the high threshold for disavowal.

5   *See Poly-America, L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016) ("While

6   disavowal must be clear and unequivocal, it need not be explicit."). In arguing for the

7   patentability of the claimed method for prediction over U.S. Patent No. 5,056,058 to Hirata et al.,

8   Ipsilium stated:

9
10   Applicant's invention, on the other hand, is not simply predicting the
    next expected frame type based on the order of occurrence of the prior
    frames in an established sequence. Instead, Applicant's invention as
11 defined in amended claims 1, 16, 17, 30 and 57 relates to predicting
    data fields in layer protocols, but not simply the expectation of the
    next type of frame, but also the values of the actual data fields, or type
12 of header fields, based upon an already received value.

13   . . .

14   In order to enhance the claims and to further clarify these distinctions
    that the claims have over the cited references, claims 1, 16, 17, 30 and
15 57 have been amended herein to specifically recite that the prediction
    is based upon a correlation between the first value received and a
16 property of the fields yet to be received. Accordingly, the claims as
    amended are not disclosed, taught or rendered obvious by the Hirata
17 reference alone.

18

19 Piepmeier Decl. Ex. D, at 17. Ipsilium's representation in this excerpt is also consistent with the

20 '681 Patent's specification, which uniformly describes a process of predicting unreceived

21 information based on already received information. *See, e.g.,* '681 Patent 3:7–11 ("The System

22 predicts a value of at least one other one of the fields of one other one of the packets from the set

23 of packets based on the value of the received field before the the other packet containing the other

24 field is received.").

25   Although the Court rejects Ipsilium's position that the claimed correlation includes where

26 a "first value" has not yet been received, it does not necessarily follow that the Court should

27 entirely redraft six claims. Cisco proposes redrafting claims 1, 16, 17, 18, 30, and 57 to state:

28 "based on a correlation between the first received value and a property of the not yet received

field." But not all claims are as amenable to this rephrasing as claim 1. Claim 30, for example,

does not even use the term "first value." Given the general aversion to rewriting claims, especially

in Cisco's proposed wholesale fashion, the Court considers it more prudent to hold that no

construction is necessary, but that the plain and ordinary meaning does not permit the first

correlate to be an unreceived field.

7. Method Claims and Step Orders ('681 Patent and '777 Patent)

Ipsilium's Construction	Cisco's Construction
No step order is required	The steps of each method claim must be performed in order.

The Court adopts Cisco's construction and finds that each disputed method claim

must be performed in order.

This dispute concerns independent claims 1, 2, 44, and 55 and dependent claims 3, 5, 6, 7,

9, 10, 14, 45, and 46 of the '681 Patent, as well as independent claims 1, 14, 44, and 55 and

dependent claims 2, 3, 4, 6, 8, 9, 45, and 46 of the '777 Patent. Am. JCCS at 7–8. Claim 44 of the

'681 Patent is one example of how the term is used in the claim language:

Claim 44

44. A method for replying to packets that have a plurality of fields, the packets being broken up into one or more packets, before the packets are entirely received, comprising:
  receiving one or more of the fields of the packet;
  predicting one or more other fields of the packet before the one or more other fields are received;
  generating a reply packet based on the one or more received fields and the predicted one or more other fields; and
  transmitting the reply packet.

The parties dispute whether claim language throughout the Asserted Patents dictate that the

steps of method claims must be performed in the order provided in the claims. Ipsilium argues

against this requirement, contending that "[u]nless the steps of a method [claim] actually recite an

order, the steps are not ordinarily construed to require one." *See* Op. Br. at 19 (citing *Interactive*

Gift Express, Inc. v. Compuserve Inc., 256 F.3d 1323, 1342 (Fed. Cir. 2001) (citation omitted)).

Ipsilium then adds that the Asserted Patents disclaim that "while a series of steps have been

1 described with regard to FIGS. 7A and 7B, the order of the steps may be changed in other

2 implementations consistent with the present invention." *Id.* (citing '681 Patent, 11:1–4). With

3 regard to claim 44 in particular, Ipsilium maintains that "[w]hile the 'generating' and

4 'transmitting' steps necessarily follow an order . . . the 'receiving' and 'predicting' steps are

5 completely independent of each other." *Id.* at 20.

6   In response, Cisco argues that the Court should construe method claims "to require that its

7 steps be performed in order if the claim implicitly requires that order, such as where 'the steps of

8 [the] method claim refer to the completed results of the prior step.'" Resp. Br. at 20 (citing *E-Pass*

9 *Techs., Inc. v. 3Com Corp.*, 473 F.3d 1213, 1222 (Fed. Cir. 2007). Claim 44, for example,

10 contains several steps that refer to completed results of the prior step. And given that Ipsilium

11 concedes that the "generating" and "transmitting" steps necessarily progress in that order—and

12 after the "receiving" and "predicting" steps—the only dispute is whether the "receiving" step must

13 come before the "predicting" step. *See Markman* Tr. 58:13–22. Cisco argues it must, because the

14 "predicting" step refers to "*other* fields," which necessarily "implies that you have *already*

15 received something else, which means predicting must occur *after* receiving step." Resp. Br. at

16 22. Regarding the disclaimer that the "order of the steps may be changed," Cisco characterizes

17 that language as a "vague boilerplate statement [that] cannot change that the claims were drafted

18 to mandate a particular order." Resp. Br. at 23. Finally, Cisco notes that the following language

19 from the prosecution history supports a limited construction, in which even the "receiving" and

20 "predicting" steps must be performed in that order:

21
22   In sharp contrast [to the Mattaway reference], Applicant receives a
first field of a packet, predicts a second field, then proceeds with
processing of the packet based on the predicted second field and the
23   first received field while awaiting receipt of the second field. It is
only upon receipt of the second field that Applicant checks for errors
24   or even employs any error correction methods.

25 *See* Resp. Br. at 22–23 (citing Resp. Br. Ex. A, '681 Patent File History, February 4, 2003 Letter

26 to PTO at 8).

27   Although the parties seek construction regarding the performance order for numerous

28 method claims, they only discuss claim 44 of the '681 Patent in any detail. Having reviewed each

disputed method claim, the Court finds that only claim 44 of the '681 Patent is even open for debate. Claim 1 of the '861 Patent, for example, expressly contemplates that one field is received before any predicting step takes place. Turning then to claim 44, the Court agrees with Cisco that the claim implicitly requires that "receiving" occur before "predicting. The Court recognizes that "not every process claim is limited to the performance of its steps in the order written." *Loral Fairchild Corp. v. Sony Corp.*, 181 F.3d 1313, 1322 (Fed. Cir. 1999). But "the sequential nature of the claim steps is apparent from the plain meaning of the claim language and nothing in the written description suggests otherwise." *See Mantech Envtl. Corp. v. Hudson Envtl. Servs., Inc.*, 152 F.3d 1368, 1373 (Fed. Cir. 1998). As Cisco observes, the "predicting" step's reference to "other" fields implies something already took place, "which means predicting must occur *after* [the] receiving step." *See* Resp. Br. at 22. And nothing from the claim language, written description, or prosecution history demonstrates that the patentee ever contemplated a method of "predicting" before "receiving."

8. Preambles as Limiting ('681 Patent and '777 Patent)

Ipsilium's Construction	Cisco's Construction
Preambles are not limiting	Preambles are limiting

The Court withholds judgment as to whether preambles are limiting in the manner that Cisco requests.

This dispute concerns independent claims 1, 2, 16, 17, 18, 30, 31, 44, 49, 54, 55, and 57 of the '681 Patent, as well as independent claims 1, 14, 16, 17, 28, 30, 42, and 57 of the '777 Patent. Am. JCCS at 3–4. Claim 1 of the '681 Patent is one example of a disputed preamble:

Claim 1

1. **A method for predicting one or more fields of a packet having a plurality of fields, the packet belonging to a set of packets, each of the fields containing data representing a value, the method comprising**:
  receiving one or more of the fields of the packet;
  analyzing a first value of at least one of the received fields;

> predicting a second value of at least one other field of the packet not yet received, based on a correlation between the first value and a property of the at least one other field not yet received; and
>
> processing the packet based on the one or more received fields and the predicted at least one other field.

Preambles generally "do[] not limit the claims." *Georgetown Rail Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1236 (Fed. Cir. 2017) (quoting *Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002)). A preamble may limit the claims, however, where (1) "it recites essential structure or steps"; (2) "claims depend[] on a particular disputed preamble phrase for antecedent basis"; (3) it "is essential to understand limitations or terms in the claim body"; (4) it "recit[es] additional structure or steps underscored as important by the specification"; or (5) there was "clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art." *Id.* (quoting *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002)). Conversely, preambles are not limiting "where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention." *Id.* (quoting *Catalina Mktg. Int'l, Inc.*, 289 F.3d at 808). Courts determine whether to treat preambles as limiting based on a review of the entire patent, "to gain an understanding of what the inventors actually invented and intended to encompass by the claim." *Id.* (quoting *Catalina Mktg. Int'l, Inc.*, 289 F.3d at 808).

Ipsilium argues that claim 1's preamble "merely sets the context and the intended use for the invention" and that "deleting the preamble would have no effect, as the claim body independently recites the structure or steps to accomplish the prediction." Op. Br. at 20–21. Cisco disagrees, and argues that the preamble "provides an antecedent basis for multiple terms appearing in the claim[] including 'packet,' 'set of packets,' and 'one or more fields.'" Resp. Br. at 24. According to Cisco, this shows that "the preamble is limiting because it is necessary to give meaning to at least three different terms recited in the bodies of the claims." *Id.*

The Court finds that it cannot at this stage adopt a blanket construction regarding all preambles. At the *Markman* hearing, Cisco maintained that the Court could lump together all disputed preambles into two general groups. *Markman* Tr. 73:3–9. Cisco's briefing, however,

1   provides inconsistent information regarding what exactly Cisco seeks from the Court. At one

2   point, in discussing claim 1 of the '681 Patent, Cisco's claim construction brief maintains that the

3   preamble contained no less than three terms that provided an antecedent basis for terms appearing

4   in the claims. Resp. Br. at 24 (arguing the preamble provides antecedent basis for at least

5   "packet," "set of packets," and "one or more fields"). But in an exhibit attached to its brief—

6   which Cisco represented as "highlight[ing] similar examples of antecedent bases found in the

7   preambles of independent claims" throughout the Asserted Patents—Cisco only identified

8   "packet" as the relevant term in various preambles that provide antecedent basis for terms

9   appearing in claims. *Compare* Resp. Br. at 25 ("This reasoning applies to almost all of the

10   asserted independent claims, as demonstrated in the attached Exhibit G-H, which highlights

11   similar examples of antecedent bases found in the preambles of independent claims 1, 2, 16, 17,

12   18, 30, 31, 44, 49, 54, 55, and 57 of the '681 patent and claims 1, 14, 16, 17, 28, 30, 42, and 57 of

13   the '777 patent."), *with* Resp. Br. Ex. G (highlighting only "packet" in various preambles,

14   including for claim 1).

15   To determine whether preambles are limiting, the Court must review each preamble with

16   an eye toward the patent as a whole. *See Georgetown Rail Equip. Co.*, 867 F.3d at 1236. The

17   Court is not persuaded that such an individualized and holistic approach is compatible with

18   Cisco's request for a blanket conclusion as to all preambles, especially given the inconsistent

19   information provided by Cisco. Thus, while a blanket approach might be warranted in some

20   circumstance, this is not one of them. Accordingly, the Court withholds judgment as to whether

21   preambles are limiting in the manner that Cisco requests.

22   **III.   CONCLUSION**

23   The Court **GRANTS** Cisco's motion to strike. In addition, the Court **CONSTRUES** the

24   disputed terms as follows:

25   //

26   //

27   //

28   //

Patent	Claim Term	Construction
'681, '777	"reply packet"	No construction necessary – Plain and ordinary meaning is not limited to packets directed back to the originator of the received fields
'681, '777	"means for obtaining one of the fields of the packet"	<u>Function</u>: obtaining one of the fields of the packet ize <u>Structure</u> ('681 Patent): the "communication interface" disclosed at Col. 4:60–61. <u>Structure</u> ('777 Patent): the "communication interface" disclosed at Col. 4:7–8.

'681, '777	"means for predicting a second value of one or more other fields of the packet based on a correlation between the first value and a property of one or more other fields before the one or more other fields are obtained" (the '681 Patent) / "means for predicting how the packet will be processed by upper level protocols, application protocols or both based on the value of the obtained field and further predicting a value of at least one other field of the packet not yet received based on the prediction of how the packet will be processed" (the '777 Patent)	Function: predicting a second value of one or more other fields of the packet based on a correlation between the first value and a property of one or more other fields before the one or more other fields are obtained ('681 Patent) / predicting how the packet will be processed by upper level protocols, application protocols or both based on the value of the obtained field and further predicting a value of at least one other field of the packet not yet received based on the prediction of how the packet will be processed ('777 Patent) Structure: a processor or microprocessor executing instructions and/or hardwired circuitry, silicon via combination of logic gates implementing the following algorithms: predicting due to: '681 Patent - fragmentation (8:64–9:7); - segmentation (9:18–32); - IP packet length (Prov. Appl. at IP000228–229); or - sequence number (Prov. Appl. at IP000071). '777 Patent - protocol field (7:33–8:3); - flags field (7:33–8:3) - IP packet length (Prov. Appl. at IP000228–229); or - total length (Prov. Appl. at IP000412).
'681, '777	"means for processing the packet based on the obtained field and the predicted one or more other fields" ('681 Patent) / "means for processing the packet based on at least the obtained field and the predicted at least one other fields" ('777 Patent)	Function: processing the packet based on the obtained field and the predicted one or more other fields ('681 Patent) / processing the packet based on at least the obtained field and the predicted at least one other fields ('777 Patent) Structure: Indefinite for failing to disclose a structure that performs the claimed function.

'681, '777	"predicting a [second] value of at least one other field of the packet not yet received"	'681 Patent, claim 1: "predicting a second value of at least one other field of the packet before that field is received" '681 Patent, claim 2: "predicting a value of at least one other field of the packet before that field is received" '777 Patent, claim 1: "predicting a value of at least one other field of the packet before that field is received" '777 Patent, claim 14: "predicting a value of at least one other field of the packet before that field is received"
'681	"correlation" terms	No construction necessary – Plain and ordinary meaning does not permit the first correlate to be an unreceived field
'681, '777	Method Claims and Step Orders	The steps of each method claim must be performed in order
'681, '777	Preambles as Limiting	The Court withholds judgment as to whether preambles are limiting

The Court **SETS** a further case management conference ("CMC") for May 22, 2019 at 2:00 p.m., to occur concurrently with the hearing on Ipsilium's pending motion for leave to file amended infringement contentions.[7] The Court also **DIRECTS** the parties to meet and confer before the CMC to discuss a proposed case schedule through trial and to submit a joint CMC statement by May 15, 2019.

IT IS SO ORDERED.

Dated: 4/16/2019

HAYWOOD S. GILLIAM, JR.
United States District Judge

_____

[7] In the remaining briefing on Ipsilium's motion for leave to file amended infringement contentions, the Court expects the parties to discuss whether this order has any impact on the resolution of that motion.